

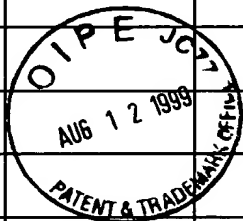
FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)ATTY DOCKET NO.
26083/201SERIAL NO.
09/288,719APPLICANT
Roland KONTERMANN *et al.*FILING DATE
April 9, 1999GROUP
1641

Date Submitted to PTO: August 12, 1999

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE



RECEIVED
AUG 13 1999
TECH CENTER 1600/2900

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	K. FitzGerald et al., "Improved tumour targeting by disulphide stabilized diabodies expressed in <i>Pichia pastoris</i> ", Protein Engin. Vol. 10, No. 10, pp. 1221-1225, 1997.
✓	P. Holliger et al., "Specific killing of lymphoma cells by cytotoxic T-cells mediated by a bispecific diabody", Protein Engin. Vol. 9, No. 3, pp. 299-305, 1996.
✓	A. Plückthun et al., "New protein engineering approaches to multivalent and bispecific antibody fragments", Immuno. Vol. 3, pp. 83-105, 1997.
✓	Z. Zhu et al., "High level secretion of a humanized bispecific diabody from <i>Escherichia coli</i> ", Biotech. Vol. 14, pp. 192-196, 1996.

EXAMINER

DATE CONSIDERED

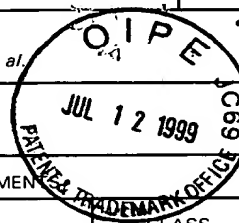
11/5/01

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: July 12, 1999

ATTY DOCKET NO.
26083/201SERIAL NO.
09/288,719APPLICANT
Roland KONTERMANN et al.FILING DATE
April 9, 1999GROUP
1641

RECEIVED

JUL 13 1999

TECH CENTER 1600/2900

FOREIGN PATENT DOCUMENT

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
SR	A1	196 17 851	11/97	FED. REP. OF GERMANY				ABS.
	A2	196 39 103	03/98	FED. REP. OF GERMANY				ABS.
	A3	196 49 645	04/98	FED. REP. OF GERMANY				ABS.
	A4	196 51 443	06/98	FED. REP. OF GERMANY				ABS.
	A5	197 04 301	03/98	FED. REP. OF GERMANY				ABS.
	A6	197 10 643	09/98	FED. REP. OF GERMANY				ABS.
	A7	0 790 313	08/97	EUROPE				ABS.
	A8	0 860 445	08/98	EUROPE				
	A9	96/06943	03/96	WIPO				
	A10	93/06217	04/93	WIPO				

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

All	A11	BIOCCA et al., "Intracellular Immunization: Antibody Targeting To Subcellular Compartments", <i>Trends In Cell Biology</i> , Vol. 5:248-253, (1995)	
	A12	DEONARAIN et al., "Targeting Enzymes For Cancer Therapy: Old Enzymes In New Roles", <i>Br. J. Cancer</i> , Vol. 70:786-794, (1994)	
	A13	ELLIS, "Vaccine Development: Progression From Target Antigen To Product", <i>Genetically Engineered Vaccines</i> , pp. 263-271, (1992)	
	A14	FANGER et al., "Bispecific Antibodies", <i>Critical Review In Immunology</i> , Vol. 12(3,4):101-124, (1992)	
	A15	GLOCKSHUBER et al., "A Comparison Of Strategies To Stabilized Immunoglobulin F ₂ -Fragments", <i>Biochemistry</i> , Vol. 29:1362-1367, (1990)	
	A16	HARRIS et al., "Gene Therapy for Cancer Using Tumour-Specific prodrug Activation", <i>Gene Therapy</i> , Vol. 1:170-175, (1994)	
	A17	HAWKINS et al., "A Genetic Approach To Idiotypic Vaccination", <i>Journal Of Immunotherapy</i> , Vol. 14:273-278, (1993)	

EXAMINER

DATE CONSIDERED

1/15/02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet <u>2</u> of <u>3</u>		FQRM PTO 1449 (modified)		ATTY DOCKET NO. 26083/201		SERIAL NO. 09/288,719	
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				APPLICANT Roland KONTERMANN et al.			
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)				FILING DATE April 9, 1999		GROUP 1641	
Date Submitted to PTO: July 12, 1999							
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
	A18		HOCHULI et al., "Genetic Approach To Facilitate Purification Of Recombinant Proteins With A Novel Metal Chelate Absorbent", <i>Biotechnology</i> , pp. 1321-1325, (1988)				
	A19		HOLLIGER et al., "Engineering Bispecific Antibodies", <i>Current Opinion In Biotechnology</i> , Vol. 4:446-449, (1993)				
	A20		HOLLIGER et al., Retargeting Serum Immunoglobulin With Bispecific Diabodies", <i>Nature Biotechnology</i> , Vol. 15:632-636, (1997)				
	A21		HOLLIGER et al., "Diabodies: Small Bivalent And Bispecific Antibody Fragments", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , Vol. 90:6444-6448, (1993)				
	A22		JONES et al., "Replacing The Complementarity-Determining Regions In A Human Antibody With Those From A Mouse", <i>Nature</i> , Vol. 321:523-525, (1986)				
	A23		KONTERMANN et al., "Complement Recruitment Using Bispecific Diabodies", <i>Nature Biotechnology</i> , Vol. 15, (1997)				
	A24		KREBS et al., "Recombinant Human Single Chain Fv Antibodies Recognizing Human Interleukin-6", <i>The Journal of Biological Chemistry</i> , pp. 2858-2865, (1998)				
	A25		LUCIBELLO et al., "Periodic cdc25C Transcription Is Mediated By A Novel Cell Cycle-Regulated Repressor Element (CDE)", <i>The EMBO Journal</i> , Vol. 14(1):132-142, (1995)				
	A26		MALLENDER et al., "Construction, Expression, And Activity Of A Bivalent Bispecific Single-Chain Antibody", <i>The Journal Of Biological Chemistry</i> , Vol. 269(1):199-206, (1994)				
	A27		MILSTEIN et al., "Hybrid Hybridomas And Their Use In Immunohistochemistry", <i>Nature</i> , Vol. 305(6):537-541, (1983)				
	A28		MUNRO et al., "Ann Hsp70-like Protein In The ER: Identity With The 78 kd Glucose-Regulated Protein And Immunoglobulin Heavy Chain Binding Protein", <i>Cell</i> , Vol. 46:291-300, (1986)				
	A29		NISONOFF et al., "Quantitative Estimation Of The Hybridization Of Rabbit Antibodies", <i>Nature</i> , Vol. 194:355-359, (1962)				
A30		PERISIC et al., "Crystal Structure Of A Diabody, A Bivalent Antibody Fragment", <i>Structure</i> , Vol. 2(12):1217-1226, (1994)					
EXAMINER			DATE CONSIDERED <u>2/15/02</u>				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: July 12, 1999

ATTY DOCKET NO.
26083/201APPLICANT
Roland KONTERMANN *et al.*FILING DATE
April 9, 1999SERIAL NO.
009/288,719

JUL 12 1999

GROUP
1

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

A31	POWER et al., "High-Level Temperature-Induced Synthesis Of An Antibody VH-Domain In <i>Escherichia Coli</i> Using The PelB Secretion Signal", <i>Gene</i> , Vol. 113:95-99, (1992)
A32	RENNER et al., "Cure Of Xenografted Human Tumors By Bispecific Monoclonal Antibodies And Human T Cells", <i>Science</i> , Vol. 264:833-835, (1994)
A33	RIECHMANN et al., "Reshaping Human Antibodies For Therapy", <i>Nature</i> , Vol. 332:323-327, (1988)
A34	ROSEN et al., "The Location Of Cis-Acting Regulatory Sequences In The Human T Cell Lymphotropic Virus Type III (HTLV-III/LAV) Long Terminal Repeat", <i>Cell</i> , Vol. 41:813-823, (1985)
A35	SAHIN et al., "Specific Activation Of The Prodrug Mitomycin Phosphate By A Bispecific Anti-CD30/Anti-Alkaline Phosphatase Monoclonal Antibody", <i>Cancer Research</i> , Vol. 50:6944-6948, (1990)
A36	VAN DE WINKEL et al., "Immunotherapeutic Potential Of Bispecific Antibodies"
A37	VERHOEYEN et al., "Reshaping Human Antibodies: Grafting An Antilysozyme Activity", <i>Science</i> , Vol. 239:1534-1537, (1988)
A38	WESTERINK et al., "Anti-idiotypic Antibodies As Vaccines Against Carbohydrate Antigens", <i>Springer Semin Immunopathol</i> , Vol. 15:227-234, (1993)
A39	ZHU et al., "Remodeling Domain Interfaces To Enhance Heterodimer Formation", <i>Protein Science</i> , Vol. 6:781-788, (1997)
A40	MCCARTNEY et al., "Engineering Disulfide-linked Single-chain Fv Dimers [(sFv) ₂] With Improved Solution And Targeting Properties: Anti-Digoxin 26-10 (sFv) ₂ and anti-c-erbB-2 741F8 (sFv) ₂ Made By Protein Folding And Bonded Through C-terminal Cysteiny Peptides", <i>Protein Engineering</i> , Vol. 8(3):301-314, (1994)

EXAMINER

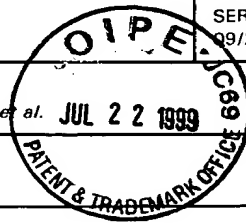
DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.
026083/0201SERIAL NO.
09/288,719APPLICANT
Roland KONTERMANN et al.FILING DATE
April 9, 1999GROUP
1641LIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: July 22, 1999



U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

A1	✓	PLÜCKTHUN et al.; "New Protein Engineering Approaches to Multivalent and Bispecific Antibody Fragments"; Immunotechnology; Vol. 3; 1997; pp. 83-105.
A2		FITZGERALD et al.; "Improved Tumour Targeting by Disulphide Stabilized Diabodies Expressed in Pichia Pastoris"; Protein Engineering; vol. 10, No. 10; 1997; pp. 1221-1225.
A3		HAYDEN et al.; "Single-chain Mono- and Bispecific Antibody Derivatives With Novel Biological Properties and Antitumour Activity From a COS Cell Transient Expression System"; Therapeutic Immunology; Vol. 1; 1994; pp. 3-15.
A4		KONTERMANN et al.; "Enzyme Immunoassays Using Bispecific Diabodies"; Immunotechnology; Vol. 3; 1997; pp. 137-144.
A5		MULLEN; "Metabolic Suicide Genes in Gene Therapy"; Pergamon; Vol. 63; 1994; pp. 199-207.

EXAMINER

DATE CONSIDERED

1/15/01

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

of 1

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

LIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: October 21, 1999

ATTY DOCKET NO.
026083/0201

SERIAL NO. 09/288,719

APPLICANT: KONTERMANN ET AL.

FILING DATE: April 9, 1999

GROUP: 1641

OCT 21 1999

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>ALR</i>	B1	Shi-Zhen Hu <i>et al.</i> ✓	"Minibody: A Novel Engineered Anti-Carcinoembryonic Antigen Antibody Fragment (Single-Chain Fv-C ₄ H ₃) Which Exhibits Rapid, High-Level Targeting of Xenografts" <i>Cancer Research</i> 56: 3055-3061 (July 1, 1996)

EXAMINER *AND Becq* DATE CONSIDERED *11/5/01*

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.